

**Amendments to the Claims**

This listing of claims, if entered, will replace all prior versions and listings of claims in the above-identified application.

**Listing of Claims**

1 - 115. Canceled

116. (Previously Presented) A method comprising:  
receiving at least one SQL statement, at a computer system, wherein  
the at least one SQL statement is configured to operate on a first table and  
a second table, and  
the at least one SQL statement comprises an SQL statement that is  
configured to join the first table and the second table;  
automatically generating, using a processor of the computer system, a set of SQL  
statements to query the first table and the second table, wherein  
the set of SQL statements are based, at least in part, upon the at least one  
SQL statement,  
the first table and the second table are stored in a computer-readable  
storage medium of the computer system,  
the automatically generating uses a relationship between the first table and  
the second table to generate the set of SQL statements, and  
the set of SQL statements comprises SQL statements other than the at least  
one SQL statement;  
producing a first result set by querying the first table using the set of SQL  
statements, wherein  
the querying the first table is performed using the processor;  
producing a second result set by querying the second table using the set of SQL  
statements, wherein  
the querying the second table is performed using the processor, and  
the querying the first table and the querying the second table are  
performed without joining the first table and the second table;

joining, using the processor, the first result set and the second result set to produce a third result set; and  
returning the third result set, in response to the receiving the at least one SQL statement.

117. (Previously Presented) The method of claim 116 wherein the relationship comprises:

a parent/child relationship between the first and second tables, wherein  
one of the first and second tables is a parent table, and  
if the first table is the parent table, the second table is a child table, and  
if the second table is the parent table, the first table is the child table.

118. (Previously Presented) The method of claim 117 further comprising:  
querying the parent table using the set of SQL statements to produce the first result set; and  
using the first result set in constructing a second set of SQL statements to query the child table, wherein  
the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.

119. (Previously Presented) The method of claim 118 further comprising:  
querying the child table using the second set of SQL statements to produce the second result set.

120. (Currently Amended) The method of claim 119 wherein  
the third result set depends on the querying the first table and the querying the second table, wherein  
the querying the first table is performed using the processor to  
execute the set of SQL statements against the first table to  
produce the first result set, and  
the querying the second table is performed using the processor to  
execute the second set of SQL statements against the second  
table to produce the second result set.

121. (Previously Presented) The method of claim 118 wherein the second set of SQL statements comprises:
- a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.
122. (**Currently Amended**) The method of claim 116 further comprising: using the first result set in constructing a second set of SQL statements to query the second table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table,  
**wherein**  
**the querying the first table is performed using the processor to execute the set of SQL statements against the first table to produce the first result set, and**  
**the querying the second table is performed using the processor to execute the second set of SQL statements against the second table to produce the second result set.**
123. (Previously Presented) The method of claim 122 further comprising: querying the second table using the second set of SQL statements to produce the second result set.
124. (Previously Presented) The method of claim 123 further comprising: returning the third result set as a result of the query of the first and second tables.
125. (Previously Presented) The method of claim 122 wherein the second set of SQL statements comprises:
- a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.

126. (Previously Presented) The method of claim 116 further comprising:  
obtaining a search specification for the query of the first and second tables,

wherein

the set of SQL statements comprises a query statement to select a record  
from at least one of the first and second tables if the record  
satisfies the search specification.

127. (Previously Presented) The method of claim 126 further comprising:  
executing the set of SQL statements to produce the third result set; and  
returning the third result set in response to the search specification.

128. (Previously Presented) A system comprising:

a processor;

a memory unit coupled to the processor;

receiving means for receiving at least one SQL statement, wherein

the at least one SQL statement is configured to operate on a first table and  
a second table, and

the at least one SQL statement comprises an SQL statement that is  
configured to join the first table and the second table;

generating means for automatically generating a set of SQL statements to query  
the first table and the second table, wherein

the set of SQL statements are based, at least in part, upon the at least one  
SQL statement,

the generating means uses a relationship between the first table and the  
second table to generate the set of SQL statements, and

the set of SQL statements comprise SQL statements other than the at least  
one SQL statement;

determining means for determining if a parent/child relationship exists between  
the first and second tables;

first producing means for producing a first result set by querying the first table  
using the set of SQL statements;

second producing means for producing a second result set by querying the second table using the set of SQL statements, wherein  
the querying the first table and the querying the second table are  
performed without joining the first table and the second table;  
joining means for joining the first result set and the second result set to produce a third result set, wherein  
the generating means, the determining means, the first querying means,  
the second querying means and the joining means reside in the  
memory unit; and  
returning means for returning the third result set, in response to receiving the at least one SQL statement.

129. (Previously Presented) The system of claim 128 further comprising:  
parent table determining means for determining if one of the first and second tables is a table, if the parent/child relationship exists, and configured to indicate  
if the first table is the parent table, that the second table is a child table,  
and  
if the second table is the parent table, that the first table is the child table,  
wherein  
the parent table resides in the memory unit.

130. (Previously Presented) The system of claim 129 further comprising:  
querying means for querying the parent table using the set of SQL statements to produce the first result set; and  
using means for using the first result set in constructing a second set of SQL statements to query the child table, wherein  
the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table, and  
the querying means and the using means reside in the memory unit.

131. (Currently Amended) The system of claim 130 wherein the second querying means is configured to query the child table using the second set of SQL statements to produce the second result set, wherein the first producing means is configured to query the first table by executing the set of SQL statements against the first table to produce the first result set, and the second producing means is configured to query the second table by executing the second set of SQL statements against the second table to produce the second result set.
132. (Previously Presented) The system of claim 131 wherein the result depends on the querying the first table and the querying the second table.
133. (Previously Presented) The system of claim 130 wherein the second set of SQL statements comprises:  
a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.
134. (Currently Amended) The system of claim 128 further comprising: using means for using the first result set in constructing a second set of SQL statements to query the second table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table, and said using means resides in the memory unit,  
the first producing means is configured to query the first table by executing the set of SQL statements against the first table to produce the first result set, and the second producing means is configured to query the second table by executing the second set of SQL statements against the second table to produce the second result set.

135. (Previously Presented) The system of claim 128 further comprising:  
obtaining means for obtaining a search specification for the query of the first and  
second tables, wherein  
the set of SQL statements comprises a query statement to select a record  
from at least one of the first and second tables if the record  
satisfies the search specification, and  
said obtaining means resides in the memory unit.
136. (Previously Presented) The system of claim 135 further comprising:  
executing means for executing the set of SQL statements to produce the third  
result set; and  
returning means for returning the third result set in response to the search  
specification, wherein  
said the executing means and the returning means reside in the memory  
unit.
137. (Previously Presented) A computer program product comprising:  
receiving instructions to receive at least one SQL statement, wherein  
the at least one SQL statement is configured to operate on a first table and  
a second table, and  
the at least one SQL statement comprises an SQL statement that is  
configured to join the first table and the second table;  
generating instructions to automatically generate a set of SQL statements to query  
the first table and the second table, wherein  
the set of SQL statements are based, at least in part, upon the at least one  
SQL statement,  
the generating instructions are configured to use a relationship between the  
first table and the second table, and  
the set of SQL statements comprises SQL statements other than the at least  
one SQL statement;  
first producing instructions to produce a first result set by querying the first table  
using the set of SQL statements;

second producing instructions to produce a second result set by querying the second table using the set of SQL statements, wherein the querying the first table and the querying second table are performed without joining the first table and the second table; joining instructions to join the first result set and the second result set to produce a third result set; returning instructions to return the third result set, in response to receiving the at least one SQL statement; and a computer-readable storage medium, wherein the computer program product is encoded in the computer-readable storage media.

138. (Previously Presented) The computer program product of claim 137 wherein the relationship comprises:

a parent/child relationship between the first and second tables, wherein one of the first and second tables is a parent table, if the first table is the parent table, the second table is a child table, and if the second table is the parent table, the first table is the child table.

139. (Previously Presented) The computer program product of claim 138 further comprising:

querying instructions configured to query the parent table using the set of SQL statements to produce the first result set; and using instructions configured to use the first result set in constructing a second set of SQL statements to query the child table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.

140. (Previously Presented) The computer program product of claim 139 wherein the querying the second table queries the child table using the second set of SQL statements to produce the second result set.



141. (Currently Amended) The computer program product of claim 140 wherein

the third result set depends on the querying the first table and the querying the second table,

**the querying the first table executes the set of SQL statements against the first table to produce the first result set, and**  
**the querying the second table executes the second set of SQL statements against the second table to produce the second result set.**

142. (Previously Presented) The computer program product of claim 139 wherein

the second set of SQL statements comprises:

a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.

143. (Previously Presented) The computer program product of claim 137 further comprising:

using instructions configured to use the first result set to construct a second set of SQL statements to query the second table, wherein

the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.

144. (Currently Amended) The computer program product of claim 137 further comprising:  
obtaining instructions configured to obtain a search specification for the query of  
the first and second tables, wherein  
the set of SQL statements comprises a query statement to select a record from at  
least one of the first and second tables if the record satisfies the search  
specification, **wherein**  
**the querying the first table executes the set of SQL statements against**  
**the first table to produce the first result set, and**  
**the querying the second table executes the second set of SQL**  
**statements against the second table to produce the second**  
**result set.**

145. (Previously Presented) The computer program product of claim 144 further comprising:  
executing instructions configured to execute the set of SQL statements to produce  
the third result set; and  
returning instructions configured to return the third result set in response to the  
search specification.

146. (Previously Presented) A computer system comprising:  
a processor to execute instructions; and  
a memory to store the instructions, wherein  
the memory is coupled to the processor, and  
the instructions comprise:  
receiving instructions configured to receive at least one SQL  
statement, at a computer system, wherein  
the at least one SQL statement is configured to operate on a  
first table and a second table, and  
the at least one SQL statement comprises an SQL statement  
that is configured to join the first table and the  
second table;

generating instructions configured to automatically generate a set of SQL statements to query the first table and the second table, wherein  
the set of SQL statements are based, at least in part, upon the at least one SQL statement,  
the generating instructions use a relationship between the first table and the second table to generate the set of SQL statements, and  
the set of SQL statements comprises SQL statements other than the at least one SQL statement,  
first producing instructions to produce a first result set by querying the first table using the set of SQL statements;  
second producing instructions to produce a second result set by querying the second table using the set of SQL statements, wherein  
the querying instructions to the first table and the querying instructions to the second table are performed without joining the first table and the second table;  
joining instructions to join the first result set and the second result set to produce a third result set; and  
returning instructions to return the third result set, in response to receiving the at least one SQL statement.

147. (Previously Presented) The computer system of claim 146 wherein the relationship comprises:

a parent/child relationship between the first and second tables, wherein

one of the first and second tables is a parent table,

if the first table is the parent table, the second table is a child table, and

if the second table is the parent table, the first table is the child table.

148. (Previously Presented) The computer system of claim 147 wherein the instructions further comprise:  
querying instructions configured to query the parent table using the set of SQL statements to produce the first result set; and  
using instructions configured to use the first result set in constructing a second set of SQL statements to query the child table, wherein  
the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.

149. (Previously Presented) The computer system of claim 148 wherein the querying the second table queries the child table using the second set of SQL statements to produce the second result set.

150. (Currently Amended) The computer system of claim 149 wherein the third result set depends on the querying the first table and the querying the second table,

**the querying the first table executes the set of SQL statements against the first table to produce the first result set, and**  
**the querying the second table executes the second set of SQL statements against the second table to produce the second result set.**

151. (Previously Presented) The computer system of claim 148 wherein the second set of SQL statements comprises:  
a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.

152. (Currently Amended) The computer system of claim 146 wherein the instructions further comprise:  
using instructions configured to use the first result set to construct a second set of SQL statements to query the second table, wherein  
the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to

another table,

**the querying the first table executes the set of SQL statements against the first table to produce the first result set, and**  
**the querying the second table executes the second set of SQL statements against the second table to produce the second result set.**

153. (Previously Presented) The computer system of claim 146 wherein the instructions further comprise:

obtaining instructions configured to obtain a search specification for the querying of the first and second tables, wherein the set of SQL statements comprises a query statement to select a record from at least one of the first and second tables if the record satisfies the search specification.

154. (Previously Presented) The computer system of claim 154 wherein the instructions further comprise:

executing instructions configured to execute the set of SQL statements to produce the third result set; and returning instructions configured to return the third result set in response to the search specification.

155. (Previously Presented) A computer system comprising:  
a processor;  
a memory unit coupled to the processor;  
a receiving module configured to receive at least one SQL statement, wherein the at least one SQL statement is configured to operate on a first table and a second table, and  
the at least one SQL statement comprises an SQL statement that is configured to join the first table and the second table;  
a generating module configured to automatically generate a set of SQL statements to query the first table and the second table, wherein

the set of SQL statements are based, at least in part, upon the at least one SQL statement,  
the generating module uses a relationship between the first table and the second table, and  
the set of SQL statements comprises SQL statements other than the at least one SQL statement;  
a first producing module configured to produce a first result set by querying the first table using the set of SQL statements;  
a second producing module configured to produce a second result set by querying the second table using the set of SQL statements, wherein  
the querying of the first table and the querying of the second table are performed without joining the first table and the second table;  
a joining module configured to join the first result set and the second result set to produce a third result set, wherein  
the generating module, the determining module, the first producing module, the second producing module and the joining module reside in the memory unit; and  
a return output data module configured to return the third result set, in response to receiving the at least one SQL statement.

156. (Previously Presented) The computer system of claim 155 wherein the relationship comprises:

a parent/child relationship between the first and second tables, wherein  
one of the first and second tables is a parent table,  
if the first table is the parent table, the second table is a child table,  
if the second table is the parent table, the first table is the child table, and  
the parent table resides in the memory unit.

157. (Previously Presented) The computer system of claim 156 further comprising:

a querying module configured to query the parent table using the set of SQL statements to produce the first result set; and

a using module configured to use the first result set in constructing a second set of SQL statements to query the child table, wherein  
the second set of SQL statements comprises SQL statements other than a  
second statement that joins the second table to another table, and  
the querying module and the using module reside in the memory unit.

158. (Previously Presented) The computer system of claim 157 wherein  
the querying the second table queries the child table using the second set of SQL  
statements to produce the second result set.

159. (**Currently Amended**) The computer system of claim 158 wherein  
the third result set depends on the querying the first table and the querying the  
second table,

**the first producing means is configured to query the first table by executing  
the set of SQL statements against the first table to produce the first  
result set, and  
the second producing means is configured to query the second table by  
executing the second set of SQL statements against the second table to  
produce the second result set.**

160. (Previously Presented) The computer system of claim 157 wherein  
the second set of SQL statements comprises:  
a query statement for selecting a record having a value of a foreign key  
field of the second table equal to a value of a target key field in the  
first result set.

161. (**Currently Amended**) The computer system of claim 155 further  
comprising:  
a using module configured to use the first result set to construct a second set of  
SQL statements to query the second table, wherein  
the second set of SQL statements comprises SQL statements other than a  
second statement that joins the second table to another table, and  
said using module resides in the memory unit, **wherein**

**the first producing means is configured to query the first table by  
executing the set of SQL statements against the first table to  
produce the first result set, and  
the second producing means is configured to query the second table  
by executing the second set of SQL statements against the  
second table to produce the second result set.**

162. (Previously Presented) The computer system of claim 155 further comprising:  
an obtaining module configured to obtain a search specification for the query of  
the first and second tables, wherein  
the set of SQL statements comprises a query statement to select a record  
from at least one of the first and second tables if the record  
satisfies the search specification, and  
said obtaining module resides in the memory unit.

163. (Previously Presented) The computer system of claim 162 further comprising:  
an executing module configured to execute the set of SQL statements to produce  
the third result set; and  
a returning module configured to return the third result set in response to the  
search specification, wherein  
said the executing module and the returning module reside in the memory  
unit.